

Please replace the abstract with the following rewritten abstract:

Method of determining a surface illuminated by incident light. First the intensity ( $I_1(x,y)$ ) of light reflected from the surface is recorded in a first image of the surface. After this, the intensity ( $I_2(x,y)$ ) of light reflected from the surface is recorded in a second image of the surface, taken at a different angle of illumination. Only the diffusely reflected light is recorded. The difference between the recorded intensities of the first and the second images is determined to obtain a representation that ~~emphasises~~ emphasizes variations in gradient of the surface. This representation is further processed by signal-adapted integration to a topographic description, that is, a height function of the surface.

Please replace the paragraph beginning at page 2, line 8 and continuing through page 2, line 9 as follows:

If the difference is ~~normalised~~ normalized by division by the sum of the intensities, a ratio is obtained that is essentially directly proportional to the local derivative of the surface.

Please replace the paragraph beginning at page 4, line 24 and continuing through page 5, line 6 as follows:

In order to obtain the height function of the test surface, the derivative must be integrated. However, since the images contain noise, certain spatial frequencies must be integrated with caution. This is why the derivative

should preferably be subjected to a Fourier transform and multiplied by what is known as a Wiener filter:

$$H_R = \frac{H^*}{|H|^2 + \text{SNR}(u,v)^{-1}}$$

which performs the integration with the suppression of spatial frequencies  $u$  and  $v$ , which have an expected low signal-to-noise ~~ratio~~ ratio, SNR. The frequencies  $H$ , of the surface include both the partial derivative (in the form of  $2\pi u$ ) and the light that is spread in the material. For more detailed description of a Wiener filter, refer to Pratt, W.K. (1978), Digital Image Processing, Wiley, New York, 378-387. The surface function, which is shown in FIG. 7, also coded as a grey-value image in which lower surface areas have a darker grey value than higher surface areas, is obtained as the inverse transform of the product.

Please replace the paragraph at page 6, line 2 and continuing through page 6, line 6 as follows:

If the sum of the intensities,  $I_1(x) + I_2(x)$ , is calculated, a variation that essentially depends only on variations in reflectance is obtained according to FIG. 3E, while the structural or topographical variations are suppressed. In other words, the distribution of ~~colour~~ color on the surface is obtained, that is, the presence or absence of print. Compare also the equivalent image in the two-dimensional case according to FIG. 5.

Please replace the paragraph at page 6, line 8 and continuing through page 6, line 10 as follows:

If the ratio  $(I_1(x) - I_2(x))/(I_1(x) + I_2(x))$  is calculated, that is, the ~~normalised~~ normalized difference between the intensities, a variation is obtained according to FIG. 3F that essentially only depends on topographic variations, that is, variations in the gradient of the surface.